

CLAIMS

What is claimed is:

1. A method for providing content from a head-end to a digital device, comprising:

producing an Internet Protocol (IP) datagram including an IP header and a body segmented including a plurality of packets in a Moving Picture Experts Group (MPEG) format including a first packet and a second packet preceding the first packet, the first packet including a first packet identifier to indicate a type of data stored in a payload of the first packet and a second packet including a secondary packet identifier to indicate that the second packet includes content duplicative of content contained in the first packet and to cause the digital device to disregard content contained in the first packet; and

transmitting the IP datagram from the head-end.

2. The method of claim 1, wherein the first packet identifier is a unique value to indicate whether the payload of the first packet includes video, audio or data.

3. The method of claim 1, wherein the IP header comprises a version field to identify an IP version number, a length field to indicate either a length of the IP datagram or a length of the IP header, a source address field to include an IP address of the head-end and a destination address field to include an IP address of the digital device.

4. The method of claim 1, wherein a header of the first packet comprises the first packet identifier.

5. The method of claim 3, wherein prior to producing the IP datagram, the method further comprising:

determining whether the destination address field of the IP header is loaded with a multicast IP address,

if video is to be transmitted, each of the plurality of packets exclusively comprises a PID having a first value; and

if audio is to be transmitted, each of the plurality of packets exclusively comprises a PID having a second value differing from the first value.

6. A method for receiving content from a head-end by a digital device, comprising:

receiving an Internet Protocol (IP) datagram including an IP header and a body segmented including a plurality of packets in a Moving Picture Experts Group (MPEG) format, the plurality of packets comprises (i) a first packet of the plurality of packets including a payload having content and a header that comprises a first packet identifier to indicate a type of the content contained in the payload of the first packet, and (ii) a second packet of the plurality of packets including a payload and a secondary packet identifier to indicate that the payload of the second packet includes content duplicative of the content contained in the payload of the first packet;

recovering the duplicative content contained in the payload of the second packet; and

disregarding the content contained in the payload of the first packet.

7. The method of claim 6, wherein the second packet precedes the first packet.

8. The method of claim 6, wherein content stored in the payload of the first packet is video encrypted using a

first key and the duplicative content in the payload of the second packet is the video encrypted using a second key different than the first key.

9. The method of claim 6, wherein content stored in the payload of the first packet is video encrypted using a first encryption algorithm and the duplicative content in the payload of the second packet is the video encrypted using a second encryption algorithm different than the first encryption algorithm.

10. The method of claim 6, wherein content stored in the payload of the first packet is audio encrypted using a first key and the duplicative content in the payload of the second packet is the audio encrypted using a second key different than the first key.

11. A software packet filter program embodied in a machine readable medium and executed by a processor, the software program comprising:

a first program block to extract a plurality of packets from an incoming Internet Protocol (IP) datagram, the plurality of packets comprises (i) a first packet of the plurality of packets including a payload having content and a header that comprises a first packet identifier, and (ii) a second packet of the plurality of packets preceding the first packet, the second packet including a payload and a secondary packet identifier;

a second program block to determine that the second packet identifier identifies the content contained within the payload of the second packet is duplicative of the content contained in the payload of the first packet; and

a third program block to recover the duplicative content contained in the payload of the second packet and disregard the content contained in the payload of the first packet.

12. The software packet filter program of claim 11, wherein the second program block disregards the content contained in the payload of the first packet if the second packet identifier of the second packet preceding the first packet is set to a predetermined value.

13. The software packet filter program of claim 11, wherein the duplicative content contained in the payload of the second packet is video encrypted using a first key and the content in the payload of the first packet is the video encrypted using a second key different than the first key.

14. The software packet filter program of claim 11 further comprising:

a fourth program block to provide the duplicative content to a descrambler situated within a digital device.

15. A method for receiving content from a head-end by a digital device, comprising:

receiving an Internet Protocol (IP) datagram including a plurality of Packetized Elementary Stream (PES) packets, the plurality of PES packets comprises (i) a first PES packet of the plurality of PES packets including a first packet identifier (PID1) to indicate a type of content contained in the PES packet, and (ii) a second PES packet of the plurality of PES packets including a secondary packet identifier to indicate that the second PES packet includes content duplicative of the content contained in the first PES packet;

recovering the duplicative content contained in the second PES packet; and

disregarding the content contained in the first PES packet.